Taking the Plant Maintenance Route to Enterprise Asset Management

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1. **What is the relationship between Enterprise Asset Management and Plant Management?**

Enterprise Asset Management (EAM) is the process of managing all the assets owned by a company with the objective of maximizing the return on investment on each asset over its lifetime. EAM therefore includes plant maintenance (PM) starting from computerizing a maintenance management system.

In addition to asset maintenance, procurement, and inventory, EAM spans and integrates with material planning, human resource (including skills management), time and payroll, core financials, costing, inspections and calibrations and overall project management.

Progressive companies are, therefore, viewing the bigger picture of EAM in three dimensions and making three distinct mind-shifts:

- **Enterprise dimension** – Moving from local one plant view to enterprise view of the assets
- **Asset dimension** – Shifting from asset maintenance to asset optimization
- **Management** – Balancing asset performance, risk, and cost by focusing on higher profitability rather than focusing on minimizing costs alone.

A large number of companies are not only experiencing increasing maintenance costs but are also experiencing increasing downtime costs that outstrip direct maintenance costs by a significant proportion.

Therefore, there is a distinct requirement for getting in terms with both maintenance processes together with its costs and moving to EAM.

2. **What are the key issues that companies are dealing with?**

Most company surveys reveal several critical issues that companies are trying to resolve. A number of these issues emanate from the maintenance and asset management process being historical and not entirely based on future business requirements. In addition to these issues, executive management in these companies are also experiencing one or more of the following issues:

- Ineffective capital expenditure management resulting in low return on asset capital employed.
- Long lead time to repair because of long mobilization time. This also results in a significant number of maintenance jobs tilting towards emergency maintenance.
• Untimely and costly equipment failures.

• Poor planning because of lack of integration with human resources data. This results in idle skills and manpower in some cases and overloaded manpower and skills in others.

• Mismanaged parts inventory resulting in high or low availability of parts.

• Knowledge for maintenance procedures remains in unread manuals or with specific people. That knowledge goes away when the person goes. This results in suboptimal resource utilization.

• Recording same data in several places due to lack of data recording tools. Duplicating data entry results in taking time out from maintenance work. Therefore, some companies record minimum data only. This hampers quality of historical data that is critical to asset maintenance and management.

• No integration with other production and financial systems resulting in the lack of timely and accurate preventive maintenance data, poor and inadequate planning, scheduling, and maintenance activities, and inconsistent costing and accounting data

3. What is mandatory?

Progressive companies are not only thinking of but are also taking the big step of implementing Integrated Enterprise Resource Planning software and tools to visualize their EAM scenarios. As a first step, they are implementing Plant / Asset management modules. For such a comprehensive project to succeed, the following aspects become mandatory:

• Management drive – Time and again this becomes the most critical factor for the success of any initiative of this dimension. Any implementation has the best chances of success if the need originates out of the maintenance department and is driven to completion by executive management. Senior management involvement may not guarantee success but absence of involvement, time and again, causes failure.

• Integrated ERP software – For the effort put in to lead to commensurate returns, it is imperative that the plant maintenance and asset management modules are integrated and are an integral part of the same comprehensive and complete ERP package.
• Data management—Accurate historical data and a clear process for gathering current data go a long way in implementing the system at a higher level of success. Those companies that begin the data cleansing process ahead of time have a much better chance of adoption of the integrated system.

• Best practices adoption – This gets us to the age-old question put forth by a number of maintenance departments - Shouldn’t we first replicate our current processes as we are comfortable with them? Successful companies become more successful when they look outside and adopt best practices followed by other successful companies. Same is the case with EAM and PM. Good software tools come with global best practices in their respective areas for you to look, tweak and implement.

• Partner selection – Such an implementation will necessarily involve software and a good partner. In addition to bringing in their expertise, a partner also contributes to bringing various people within the company together. That, in many cases, contributes vastly to success.

• Project management – Last but not the least, a robust project management methodology supported by tools like a knowledge portal, contributes a great deal to making such an initiative successful.

4. What are the benefits?

A good program of this kind always has a component of measuring returns. These components come in different shapes and sizes. Following is a list of a representative set of benefits from an EAM / PM implementation:

• Reduction in overall plant and equipment downtime, more planned events than unplanned events, and a faster reaction to unplanned events result in increased production and schedule attainment. Most of this can result in higher revenue.

• On the operating cost front, maintenance projects are better planned, repair cycles are faster, parts inventory is optimized, on-time payments to vendors become common, and on the whole better data is available. This increases maintenance productivity, reduces overtime, reduces emergency purchases, provides a higher negotiating leverage, and increases budgeting efficiency.

• Those who are concerned with the working capital requirement will find improved equipment availability, reduction in excess inventory, and faster repair cycles.
Then there are some definite intangibles, like not having to enter same data again in different places and one transaction automatically resulting in cohesive and integrated transaction in financials. To some others it brings in a long-desired method to the madness.

With all these benefits, leading and progressive companies are well on their way to visioning and implementing EAM and PM.

5. Where does Osprey fit in?

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Osprey’s SAP solutions and services include SAP Roll-outs; Enhancements, Migrations, and Maintenance solutions; Integration with Non-SAP Applications; Training and Documentation; and Life Cycle Support.

Osprey’s Quickstart® Solutions are out-of-the-box and industry-specific SAP solutions that are designed to address business issues. This results in speeding up the time to go-live and reducing the risk of deployment. Quickstart® handles complex sales, costing, manufacturing, EAM, PM, and quality management issues that companies face.

Osprey delivers this value proposition based on a decade of experience in SAP services, strong quality driven processes and methodologies, vertical industry solutions, a unique proprietary Knowledge Portal, strong SAP relationships and customer satisfaction track records. Osprey’s global reach enables its customers in global roll-outs, implementation and support.